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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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ALBERT W. WATKINS 30844 NE 1ST AVENUE ST. JOSEPH, MN 56374			EXAMINER HEFFINGTON, JOHN M	
			ART UNIT 2179	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/678,043	Applicant(s) MCINTOSH ET AL.	
	Examiner John M. Heffington	Art Unit 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8 July 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the original filing of October 01, 2003. Claims 1-15 are pending and have been considered below.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims claim a programmerator which is not defined in the specification.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims disclose a combination that is none of a process, machine, manufacture, or composition of matter, therefore, the claimed material is not statutory.

Claims 14 and 15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims disclose a

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programmer that is none of a process, machine, manufacture, or composition of matter, therefore, the claimed material is not statutory.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Lok (US 2002/0049530 A1).

Claim 1: Lok discloses a combination comprising:

- a. a communications interface between a local computer and a remote system having (paragraphs 0021, 0033),
- b. a graphical user interface (paragraphs 0021, 0033),
- c. a scripting language (paragraphs 0021, 0033), and
- d. graphical user interface extensions that enable said scripting language to control said remote system responsive to images appearing on said remote system graphical user interface (paragraphs 0033, 0035).

Claim 2: Lok discloses the combination of claim 1 and further discloses a display of said remote system screen at said local computer (paragraph 0056, figure 5).

Claim 3: Lok discloses the combination of claim 2 and further discloses a command capture interface for generating graphical user interface language extensions commands from actions performed upon said local computer display of said remote system screen (paragraphs 0033 and 0043).

Claim 5: Lok discloses the combination of claim 1 and further discloses a graphical user interface recognition subsystem which detects image components appearing upon said remote system graphical user interface and produces an image detection signal responsive thereto (paragraphs 0033, 0036, 0043).

Claim 6: Lok discloses the combination of claim 5 and further discloses an initiate action subsystem which evokes a remote system action responsive to said image detection signal (paragraphs 0033, 0036 and 0043).

Claim 7: Lok discloses the combination of claim 1 and further discloses said communications interface further comprises

- a. a means for communicating keyboard actions to said remote system (paragraph 0037),

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- b. a means for communicating mouse actions to said remote system (paragraph 0037), and
- c. a means for communicating screen updates from said remote system to said local computer (paragraphs 0033, 0043 and 0056).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (US 2002/0049530 A1) in view of Polk et al. (US 5,634,002).

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Claim 4: Lok discloses the combination of claim 3, but does not disclose a means for transferring said graphical user interface language extensions commands to a script responsive to said actions performed upon said local computer display of said remote system screen. However, Polk discloses a method that records user inputs and saves them to a separate file, wherein the recorded inputs are used as a test script later in the testing process (column 1, lines 63-65). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add a means for transferring said graphical user interface language extensions commands to a script responsive to said actions performed upon said local computer display of said remote system screen to Lok. One could have been motivated to add a means for transferring said graphical user interface language extensions commands to a script responsive to said actions performed upon said local computer display of said remote system screen to Lok because:

- a. Lok discloses user actions performed on a remote GUI causing messages to be sent to a local computer where the messages are "captured" (paragraphs 0033, 0043),
- b. Lok also discloses that the GUI components that intercept messages from the remote GUI send back responses or render other GUI components (paragraphs 0033, 0043),
- c. Lok further discloses a local interface used to manipulate a remote GUI (paragraph 0054).

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Therefore, it would have been convenient to be able to capture user actions at a remote interface to a script file and then manipulate the remote interface from the local interface with the user actions captured in the script.

9. Claims 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (US 2002/0049530 A1) in view of Berczik et al. (US 2002/0054104 A1).

Claim 8: Lok discloses a method for remotely testing the operation of a computer system, comprising the steps of:

- a. receiving a first element of said computer system graphical user interface (paragraphs 0033, 0043, 0056);
- b. generating a user input action within said computer system responsive to said first element (paragraphs 0033, 0043, 0056); and
- c. monitoring said computer system graphical user interface for an expected second element within a predetermined time interval (paragraphs 0033, 0043, 0056),

but does not disclose signaling a failure if said predetermined time interval elapses without detecting said expected second element. However, Berczik discloses anticipating an action within a GUI, i.e. anticipating the GUI for a second element within a predetermined time interval, and providing the resources needed to process the action. It would be an error condition if the resources were not provided for the

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anticipated event. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add signaling a failure if said predetermined time interval elapses without detecting said expected second element to Lok. One could have been motivated to add signaling a failure if said predetermined time interval elapses without detecting said expected second element to Lok because it would be useful for the remote capable user interface kit in Lok to anticipate the actions of the remote interface to as to be better able to allocate resources and to be able to detect errors when the correct response is not executed.

Claim 10: Lok and Berczik disclose the method of claim 8 and Lok further further discloses the steps of:

- a. providing graphical user interface language extensions commands to a scripting language (paragraph 0033); and
- b. passing said generated user input action through said graphical user interface language extensions from said scripting language processor to a language extensions processor (paragraph 0033).

Claim 11: Lok and Berczik disclose the method of claim 8 further discloses the steps of:

- a. generating a user input action within said computer system responsive to said second element (paragraphs 0033, 0043, 0056);
- b. monitoring said computer system graphical user interface for an expected third element within a predetermined time interval (paragraphs 0033, 0043, 0056),

and Berczik further discloses anticipating an action within a GUI, i.e. anticipating the GUI for a second element within a predetermined time interval, and providing the resources needed to process the action. It would be an error condition if the resources were not provided for the anticipated event. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add signaling a failure if said predetermined time interval elapses without detecting said expected third element. One could have been motivated to add signaling a failure if said predetermined time interval elapses without detecting said expected third element to Lok because it would be useful for the remote capable user interface kit in Lok to anticipate the actions of the remote interface to as to be better able to allocate resources and to be able to detect errors when the correct response is not executed.

10. Claims 9 and 12-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Lok (US 2002/0049530 A1) in view of Berczik et al. (US 2002/0054104 A1) as applied to claim 8 above, and further in view of Polk et al. (US 5,634,002).

Claim 9: Lok and Berczik disclose the method of claim 8, but do not disclose

- a. transferring said user input action to a stored script, and

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- b. re-executing said steps of receiving, generating, monitoring and signaling subsequent to said storing step under control of said stored script.

However, Polk discloses a method that records the user inputs and saves them to a separate file, wherein the recorded inputs are used as a test script later in the testing process (column 1, lines 63-65). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add

- a. transferring said user input action to a stored script, and
- b. re-executing said steps of receiving, generating, monitoring and signaling subsequent to said storing step under control of said stored script

to Lok and Berczik. One could have been motivated to add

- a. transferring said user input action to a stored script, and
- b. re-executing said steps of receiving, generating, monitoring and signaling subsequent to said storing step under control of said stored script

because

- a. Lok discloses user actions performed on a remote GUI causing messages to be sent to a local computer where the messages are "captured" (paragraphs 0033, 0043),

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- b. Lok also discloses that the GUI components that intercept messages from the remote GUI send back responses or render other GUI components (paragraphs 0033, 0043),
- c. Lok further discloses a local interface used to manipulate a remote GUI (paragraph 0054).

Therefore, it would have been convenient to be able to capture user actions at a remote interface to a script file and then manipulate the remote interface from the local interface by re-executing the user actions captured in the script.

Claim 12: Lok and Berczik disclose the method of claim 8 and Lok further discloses the steps of:

- a. depicting said computer system graphical user interface upon a local display including said first element (paragraph 0033, 0043 and 0056); and
- b. receiving a local user input action within said local display (paragraph 0033, 0043 and 0056);

but Lok and Berczik do not disclose said generated user input action emulates said local user input action. However, Polk discloses a method that records the user inputs and saves them to a separate file, wherein the recorded inputs are used as a test script later in the testing process (column 1, lines 63-65), i.e. the script, when executed, emulates user input action. Therefore, it would have been obvious to one having

ordinary skill in the art at the time of the invention to add said generated user input action emulates said local user input action to Lok and Berczik. One could have been motivated to add said generated user input action emulates said local user input action to Lok and Berczik because, as the remote interface is manipulated as described in Lok (paragraph 0056), it would have been convenient to be able to execute a script of user commands.

Claim 13: Lok and Berczik disclose the method of claim 8 and Lok further discloses the steps of:

- a. providing graphical user interface language extensions commands to a scripting language (paragraphs 0021, 0033, 0043 and 0056),
- b. depicting said computer system graphical user interface upon a local display including said first element (paragraphs 0021, 0033, 0043 and 0056),
- c. receiving a local user input action within said local display (paragraph 0035),
- d. passing said generated user input action through said graphical user interface language extensions from said scripting language processor to a language extensions processor wherein said generated user input action emulates said local user input action (paragraphs 0021, 0033, 0043 and 0056),

but does not disclose

- a. transferring said user input action to a stored script;

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- b. re-executing said steps of receiving, generating, monitoring and signaling subsequent to said storing step under control of said stored script.

However, Polk discloses a method that records the user inputs and saves them to a separate file, wherein the recorded inputs are used as a test script later in the testing process (column 1, lines 63-65). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add

- a. transferring said user input action to a stored script;
- b. re-executing said steps of receiving, generating, monitoring and signaling subsequent to said storing step under control of said stored script

to Lok and Berczik. One could have been motivated to add

- a. transferring said user input action to a stored script;
- b. re-executing said steps of receiving, generating, monitoring and signaling subsequent to said storing step under control of said stored script

to Lok and Berczik because

- a. Lok discloses user actions performed on a remote GUI causing messages to be sent to a local computer where the messages are "captured" (paragraphs 0033, 0043),

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- b. Lok also discloses that the GUI components that intercept messages from the remote GUI send back responses or render other GUI components (paragraphs 0033, 0043),
- c. Lok further discloses a local interface used to manipulate a remote GUI (paragraph 0054).

Therefore, it would have been convenient to be able to capture user actions at a remote interface to a script file and then manipulate the remote interface from the local interface by re-executing the user actions captured in the script.

Claim 14: Lok and Berczik discloses a system

- a. enabling a local system to remotely operate a computer system through local scripts and selectively respond to changes in graphical displays upon a graphical user interface of said remote computer system, comprising (paragraphs 0021, 0033, 0043 and 0056, figure 5):
- b. an interface for communicating between said local system and said remote computer system graphical user interface responsive to said command and scripting languages (paragraphs 0021, 0033, 0043 and 0056, figure 5),
- c. a scripting language having scripting commands that control a flow of execution of said local system in combination with said command language set (paragraph 0033);

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but does not disclose

- a. a command capture interface that displays a depiction of said remote system graphical user interface display and captures user input made therein;
- b. a command language set that when processed by said local system implements both of user input emulations representative of said captured user input at said remote computer system and image processing of said remote computer system graphical displays;

However, Polk discloses a method that records the user inputs and saves them to a separate file, wherein the recorded inputs are used as a test script later in the testing process (column 1, lines 63-65). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add

- a. a command capture interface that displays a depiction of said remote system graphical user interface display and captures user input made therein;
- b. a command language set that when processed by said local system implements both of user input emulations representative of said captured user input at said remote computer system and image processing of said remote computer system graphical displays;

to Lok and Berczik. One could have been motivated to add

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- a. a command capture interface that displays a depiction of said remote system graphical user interface display and captures user input made therein;
- b. a command language set that when processed by said local system implements both of user input emulations representative of said captured user input at said remote computer system and image processing of said remote computer system graphical displays

because

- a. Lok discloses user actions performed on a remote GUI causing messages to be sent to a local computer where the messages are "captured" (paragraphs 0033, 0043),
- b. Lok also discloses that the GUI components that intercept messages from the remote GUI send back responses or render other GUI components (paragraphs 0033, 0043),
- c. Lok further discloses a local interface used to manipulate a remote GUI (paragraph 0054).

Therefore, it would have been convenient to be able to capture user actions at a remote interface to a script file and then manipulate the remote interface from the local interface by re-executing the user actions captured in the script.

Claim 15: Lok and Berczik discloses the system of claim 14 but do not disclose:

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- a. a means for storing said scripting commands;
- b. a means for inserting a command from said command language set into said storing means; and
- c. a means for executing said inserted stored command.

However, Polk discloses

- a. a means for storing said scripting commands (column 1, lines 63-65);
- b. a means for inserting a command from said command language set into said storing means (column 1, lines 63-65); and
- c. a means for executing said inserted stored command (column 1, lines 63-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add

- a. a means for storing said scripting commands;
- b. a means for inserting a command from said command language set into said storing means; and
- c. a means for executing said inserted stored command

to Lok and Berczik. One could have been motivated to add

- a. a means for storing said scripting commands;

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- b. a means for inserting a command from said command language set into said storing means; and
- c. a means for executing said inserted stored command

to Lok and Berczik because

- a. Lok discloses user actions performed on a remote GUI causing messages to be sent to a local computer where the messages are "captured" (paragraphs 0033, 0043),
- b. Lok also discloses that the GUI components that intercept messages from the remote GUI send back responses or render other GUI components (paragraphs 0033, 0043),
- c. Lok further discloses a local interface used to manipulate a remote GUI (paragraph 0054).

Therefore, it would have been convenient to be able to capture user actions at a remote interface to a script file and then manipulate the remote interface from the local interface by re-executing the user actions captured in the script.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Heffington whose telephone number is (571) 270-1696. The examiner can normally be reached on Mon - Fri 8:00 - 5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH
9/18/07


BA HUYNH
PRIMARY EXAMINER